

Claims

1. An air-suspension system for a vehicle, comprising a compressed-air accumulator (9), a compressed-air delivery device (1), at least one air-suspension bellows (64, 65, 66, 67) and an electrically activatable changeover-valve device (3), which can be switched to a first valve position in order to increase the air quantity in at least one air-suspension bellows (64, 65, 66, 67), by placing compressed-air accumulator (9) in communication with a suction port (105) of the compressed-air delivery device (1) and an outlet port (106) of the compressed-air delivery device (1) in communication with the at least one compressed-air bellows (64, 65, 66, 67), and which can be switched to a second valve position in order to decrease the air quantity in at least one air-suspension bellows (64, 65, 66, 67), by placing the at least one air-suspension bellows (64, 65, 66, 67) in communication with the suction port (105) of the compressed-air delivery device (1) and the outlet port (106) of the compressed-air delivery device (1) in communication with the compressed-air accumulator (9), characterized in that the changeover-valve device (3) can be piloted with the compressed air of the air-suspension system.
2. An air-suspension system according to claim 1, characterized in that the changeover-valve device (3) comprises a pilot valve (31) and a changeover valve (30).
3. An air-suspension system according to claim 2, characterized in that the changeover valve (30) is

designed as a 4/2-way valve that can be actuated by compressed air.

4. An air-suspension system according to claim 2 or 3, characterized in that the pilot valve (31) is designed as a 3/2-way valve that can be electrically actuated.
5. An air-suspension system according to claim 2 or 4, characterized in that the changeover valve (30) is provided with two 3/2-way valves (33, 34) that can be actuated by a single pilot valve (31) by means of compressed air.
6. An air-suspension system according to at least one of the preceding claims, characterized in that the changeover-valve device (3) is provided with a single electromagnet arrangement (301, 302).
7. An air-suspension system according to at least one of the preceding claims, characterized in that the pilot pressure for the changeover-valve device (3) is drawn from the outlet side of the compressed-air delivery device (1).
8. An air-suspension system according to at least one of the preceding claims, characterized in that the pilot pressure is discharged to the atmosphere when the changeover-valve device (3) is switched between the first and second valve positions.

9. An air-suspension system according to at least one of the preceding claims, characterized in that a check valve (52), by means of which the compressed-air delivery device (1) can be circumvented in the manner of a bypass, is connected to the ports (315, 317) of the changeover-valve device (3) in communication with the compressed-air delivery device (1).